FKC-100US **PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No:

09/640,103

Applicant: Filed:

Patrick McErlean August 15, 2000

Title:

ELECTRONIC MESSAGE PROCESSING

TC/A.U.:

Examiner:

Alina A. Boutah

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief-Patents Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

SIR:

Appellants hereby request consideration and reversal of the Final Rejection dated June 5, 2007, of claims 1-16.

This Brief is presented in the format required by 37 C.F.R. § 41.37, in order to facilitate review by the Board. In compliance with 37 C.F.R. § 41.37(a)(1), this Brief is being filed within six months from the date of the Notice of Appeal with a four-month extension fee.

The fees for filing a Brief in support of an Appeal under 37 C.F.R. § 41.20(b)(2), together with any extension fee required in connection with the filing of this Brief, are provided herewith.

I. **REAL PARTY IN INTEREST**

The real Party In Interest in this matter is Art Technology Group, Inc. Art Technology Group, Inc. purchased Primus Knowledge Solutions, Inc. and Primus Knowledge Solutions, Inc. purchased Amacis Group Limited. Amacis Group Limited has rights by virtue of an assignment recorded on August 15, 2000, at Reel/Frame 011047/0568.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences known to Appellant, Appellant's legal representative, or Assignee which may be related to, be directly affected by, or have a bearing on the Board's decision in the pending Appeal.

III. STATUS OF CLAIMS

Claims 1-16 are pending in this application and stand rejected. Claims 1-16 are appealed. Of those claims currently under appeal, claims 1, 8, 9 and 14-16 are independent.

IV. STATUS OF AMENDMENTS

The present application is under final rejection. Appellant elected not to submit a Response. Instead, Appellant filed a Notice of Appeal on September 4, 2007. The present application has been rejected six times. Prior to the present rejection, Appellant filed an Amendment, a Request for Reconsideration, an Amendment after Final Rejection, a Request for Continuing Examination, a Request for Reconsideration and an Amendment during prosecution. All of the Amendments were entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1-16 are appealed. The claimed invention is directed to a novel electronic message processing system arranged to receive electronic messages. As background, the electronic message processing system relates to the application of classification rules to electronic messages in order that the messages can be classified into one or more categories. A classification module according to the subject invention applies classification rules, where the classification rules are arranged into rule sets. The rule sets are applied to the message content in accordance with a hierarchical structure such that the result of applying one rules set to the message content determines which further rule set is next applied. This electronic message processing system may provide advantages such as: a) individual rule sets can be maintained/updated independently of the other rule sets; and b) not all classification rules need be applied to all messages. The first of these advantages, allows, for example, a number of different branches/departments of a large distributed organization to maintain their own rule set(s) without affecting the

rule sets of others, and irrespective of the internal technology with which each rule set is used.

In accordance with 37 C.F.R. §41.37(c)(1)(v), a concise explanation of the subject matter defined in the independent claim 1 under appeal is set forth below. Citations to the application's support for the claimed subject matter are made by reference to numbered page and line numbers (e.g. page 8, line 6) of Appellant's specification (AS) as originally filed (e.g., AS p. 8, line 6) as well as corresponding figures (Figs.).

Claim 1

Independent claim 1 recites an electronic message processing system arranged to receive electronic messages (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising: means for storing a plurality of classification rules (AS page 12, line 27- page 13, line 22; and page 17, lines 21-26); at least one text analyzer (AS page 9, line 28-page 10, line 6; and Fig. 2); a respective rule engine associated with the at least one text analyzer and with the rule storage means (AS page 12, lines 27-32), the at least one text analyzer and associated rule engine being cooperable to apply at least one classification rule to the content of a received electronic message and to generate at least one result based on the application of said at least one classification rule (AS page 12, line 27- page 13, line 22); a classification module co-operable with the at least one text analyzer and associated rule engine and arranged to classify the electronic message into at least one message category based on said at least one result (AS page 9, line 28-page 10, line 6; page 12, lines 20-25; and Fig. 2), wherein the classification rules are arranged into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3), the classification module being arranged to cause the at least one text analyzer in association with the associated rule engine to apply at least one of said rule sets to the message content in accordance with said hierarchical structure (AS page 16, lines 9-28; and Fig. 3) wherein the at least one result generated by application of a rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to said message content (AS page 15, lines 2-26; and Fig. 3).

Claim 8

Independent claim 8 recites a classification module tangibly embodied in a computer readable medium (page 18, lines 15-21) for use in an electronic message processing system (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising means for storing a plurality of classification rules (AS page 12, line 27page 13, line 22; and page 17, lines 21-26); at least one text analyzer (AS page 9, line 28-page 10, line 6; and Fig. 2); a respective rule engine associated with the at least one text analyzer and with the rule storage means (AS page 12, lines 27-32), the at least one text analyzer and associated rule engine being co-operable to apply at least one classification rule to the content of an electronic message received by the system and to generate at least one result based on the application of said at least one classification rule (AS page 12, line 27- page 13, line 22), the classification module being arranged for co-operation with the at least one text analyzer and associated rule engine and further arranged to classify the electronic message into at least one message category based on said at least one result (AS page 9, line 28page 10, line 6; page 12, lines 20-25; and Fig. 2), wherein the classification rules are arranged into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3), the classification module being arranged to cause the at least one text analyzer in association with the associated rule engine to apply at least one of said rule sets to the message content in accordance with said hierarchical structure (AS page 16, lines 9-28; and Fig. 3) wherein the at least one result generated by the application of a rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to said message content (AS page 15, lines 2-26; and Fig. 3).

Claim 9

Claim 9 recites, in an electronic message processing system arranged to receive electronic messages (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising means for storing a plurality of classification rules (AS page 12, line 27- page 13, line 22; and page 17, lines 21-26); at least one text analyzer (AS page 9, line 28-page 10, line 6; and Fig. 2); a respective rule engine associated the

at least one text analyzer and with the rule storage means (AS page 12, lines 27-32), the at least one text analyzer and associated rule engine being co-operable to apply at least one classification rule to the content of a received electronic message and to generate at least one result based on the application of said at least one classification rule (AS page 12, line 27- page 13, line 22); and a classification module co-operable with the at least one text analyzer and associated rule engine and arranged to classify the electronic message into at least one message category based on said at least one result (AS page 9, line 28-page 10, line 6; page 12, lines 20-25; and Fig. 2), a method of classifying an electronic message (Fig. 5) comprising: arranging the classification rules into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3); causing the at least one text analyzer, in association with the associated rule engine, to apply at least one of said rule sets to the message content in accordance with said hierarchical structure (AS page 16, lines 9-28; and Fig. 3); and determining at least one other rule set from said plurality of rule sets next to be applied to said message content depending on the at least one result generated by application of the preceding rule set from said plurality of rule sets to the message content (AS page 15, lines 2-26; and Fig. 3).

Claim 14

Independent claim 14 recites an electronic message processing system arranged to receive electronic messages (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising: means for storing a plurality of classification rules (AS page 12, line 27- page 13, line 22; and page 17, lines 21-26); a classification module arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result (AS page 9, line 28-page 10, line 6; page 12, line 20- page 13, line 22; and Fig. 2), wherein the classification rules are arranged into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3), the classification module being arranged to cause at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure (AS page 16, lines 9-28; and Fig. 3) wherein the at least one result generated by application of a rule set from said plurality of rule sets to the

message content determines at least one other rule set from said plurality of rule sets next to be applied to the message content (AS page 15, lines 2-26; and Fig. 3).

Claim 15

Independent claim 15 recites a classification module, tangibly embodied in a computer readable medium (page 18, lines 15-21), for use in an electronic message processing system for receiving electronic messages (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising means for storing a plurality of classification rules (AS page 12, line 27- page 13, line 22; and page 17, lines 21-26), wherein: the classification module is arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result (AS page 9, line 28-page 10, line 6; page 12, line 20page 13, line 22; and Fig. 2), wherein the classification rules are arranged into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3), and the classification module is arranged to cause at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure (AS page 16, lines 9-28; and Fig. 3) whereby the at least one result generated by application of a rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to the message content (AS page 15, lines 2-26; and Fig. 3).

Claim 16

Independent claim 16 recites, in an electronic message processing system arranged to receive electronic messages (AS page 8, lines 21-24; and Figs. 1 and 2), the system comprising: means for storing a plurality of classification rules (AS page 12, line 27- page 13, line 22; and page 17, lines 21-26); a classification module arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result (AS page 9, line 28-page 10, line 6; page 12, line 20-page 13, line 22; and Fig. 2), wherein the classification rules are arranged into a plurality of rule sets (Fig. 3), said rule sets being associated with one another in accordance with a hierarchical structure (AS page 14, line 26-page 15, line 2; and Fig. 3), a method of classifying an electronic

message (*Fig. 5*) comprising: causing at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure (*AS page 16, lines 9-28; and Fig. 3*); and determining at least one other rule set from said plurality of rule sets next to be applied to the message content depending on the at least one result generated by application of the preceding rule set of said plurality of rule sets to the message content (*AS page 15, lines 2-26; and Fig. 3*).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,424,997 to Buskirk Jr. et al. (Buskirk) and further in view of U.S. Patent No. 5,903,853 to Saraki. Claims 8 and 15 stand objected to as failing to provide proper antecedent basis for the claimed subject matter.

VII. ARGUMENT

A. ARGUMENT SUMMARY

1. APPELLANT'S INVENTION AS RECITED IN CLAIMS 1-16 IS PATENTABLE OVER THE DISCLOSURES OF BUSKIRK AND SARAKI BECAUSE NEITHER BUSKIRK, SARAKI, NOR THEIR COMBINATION DISCLOSE 1) "THE CLASSIFICATION RULES ARE ARRANGED INTO A PLURALITY OF RULE SETS, SAID RULE SETS BEING ASSOCIATED WITH ONE ANOTHER IN ACCORDANCE WITH A HIERARCHICAL STRUCTURE" OR 2) "THE CLASSIFICATION MODULE BEING ARRANGED TO CAUSE THE AT LEAST ONE TEXT ANALYZER ... TO APPLY AT LEAST ONE OF SAID RULE SETS TO THE MESSAGE CONTENT IN ACCORDANCE WITH SAID HIERARCHICAL STRUCTURE WHEREIN THE AT LEAST ONE RESULT GENERATED BY APPLICATION OF A RULE SET FROM SAID PLURALITY OF RULE SETS TO THE MESSAGE CONTENT DETERMINES AT LEAST ONE OTHER RULE SET FROM SAID PLURALITY OF RULE SETS NEXT TO BE APPLIED TO SAID MESSAGE CONTENT," AS REQUIRED BY CLAIM 1. CLAIMS 8, 9 AND 14-16 INCLUDE SIMILAR RECITATIONS.

The remaining claims depend from the independent claims and are not subject to rejection for at least the same reasons.

2. APPELLANT'S INVENTION AS RECITED IN CLAIMS 8 AND 15 ARE NOT SUBJECT TO OBJECTION AS LACKING PROPER ANTECEDENT BASIS BECAUSE CLAIMS 8 AND 15 INCLUDE SUPPORT FOR THE FEATURE "COMPUTER-READABLE MEDIUM" AT AS PAGE 18, LINES 15-21.

B. ISSUES

Claims 1-16 stand rejected under 35 U.S.C. §103(a) as obvious in view of the disclosures of Buskirk and Saraki. Claims 8 and 15 stand objected to as failing to provide proper antecedent basis for the claimed subject matter. There are no other rejections and no other applied references. The issues on appeal are: 1) whether the combination of Buskirk and Saraki renders Appellant's invention obvious and 2) whether the subject invention of claims 8 and 15 has basis in the specification.

C. LEGAL STANDARD

Obviousness under 35 U.S.C. §103(a)

Conditions for patentability; non-obvious subject matter.

(a)A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.. 35 U.S.C. §103 (2007)

Appellant challenges the rejections in the Office Action based on Buskirk and Saraki because Buskirk fails to disclose every limitation of pending independent claims 1, 8, 9 and 14-16 and Saraki fails to make up for the deficiencies of Buskirk. That is, the Appellant's pending claims 1-16 recites at least one feature that is not taught by Buskirk, Saraki or their combination and the addition of that feature would not be obvious. Therefore, the Examiner's rejection of Appellant's pending claims 1-16 under 35 U.S.C. §103(a) is in error.

D. APPELLANT'S INVENTION, AS RECITED IN CLAIMS 1-16 IS NOT OBVIOUS OVER THE DISCLOSURES OF BUSKIRK AND SARAKI BECAUSE NEITHER

BUSKIRK NOR SARAKI TAKEN SINGULARLY OR IN ANY PROPER COMBINATION DISCLOSES OR SUGGESTS: 1) "THE CLASSIFICATION RULES ARE ARRANGED INTO A PLURALITY OF RULE SETS, SAID RULE SETS BEING ASSOCIATED WITH ONE ANOTHER IN ACCORDANCE WITH A HIERARCHICAL STRUCTURE" OR 2) " THE CLASSIFICATION MODULE BEING ARRANGED TO CAUSE THE AT LEAST ONE TEXT ANALYZER ... TO APPLY AT LEAST ONE OF SAID RULE SETS TO THE MESSAGE CONTENT IN ACCORDANCE WITH SAID HIERARCHICAL STRUCTURE WHEREIN THE AT LEAST ONE RESULT GENERATED BY APPLICATION OF A RULE SET FROM SAID PLURALITY OF RULE SETS TO THE MESSAGE CONTENT DETERMINES AT LEAST ONE OTHER RULE SET FROM SAID PLURALITY OF RULE SETS NEXT TO BE APPLIED TO SAID MESSAGE CONTENT," AS RECITED IN CLAIM 1 OR THE SIMILAR RECITATIONS IN CLAIMS 8, 9 AND 14-16, EITHER LITERALLY OR INHERENTLY

Buskirk was initially cited in the First Office Action mailed July 30, 2004. Saraki was initially cited in the Fifth Office Action mailed November 1, 2006. Buskirk was cited in the Final Office Action mailed June 4, 2007 as teaching "wherein at least one result generated by application of the at least one rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to said message content." Saraki was cited in the Final Office Action mailed June 4, 2007 as teaching "applying rules to message content in accordance with a hierarchical structure."

Appellant respectfully disagrees that the combination of Buskirk and Saraki disclose or suggest:

- 1) classification rules arranged into a plurality of rule sets, where the rules sets are associated with one another in accordance with a hierarchical structure or
- 2) a classification module arranged to cause at least one text analyzer to apply at least one of the rule sets to the message content in accordance with the hierarchical structure, wherein at least one result generated by application of a rule set from the

rule sets to the message content **determines at least one other rule set from the rule sets next to be applied** to the message content,

as required by claim 1 (emphasis added). Claims 8, 9 and 14-16 include similar recitations.

Buskirk concerns an electronic messaging system that includes a classifier and an action selector. As shown in Fig. 2, Buskirk includes a rule applier 120 as a part of the classifier 101. The rule applier 120 is coupled to receive classification rules 125.

In the Final Office Action mailed June 4, 2007, it is asserted that Buskirk discloses "wherein the at least one result generated by the application of the at least one rule set from said plurality of rule sets to the message content determines at least one other rule set from the plurality of rule sets next to be applied to the message content." Appellant respectfully disagrees with this assertion. The rule applier 120 of Buskirk is described only at column 3, line 65 through column 4, line 18 and at column 5, lines 21-43. These passages do not indicate that the result of applying any rule set "determines at least one other rule set ... next to be applied" (emphasis added). The rules applier is described as receiving a vector of features and providing class labels and confidence levels to the action selector module. The processing performed by the rule applier at column 5, lines 21-43 is described as follows:

The extracted data is then provided in a vector format, such as a feature count table and further reduced, if desired. The values of the feature vector may be in binary or numerical form, and may be provided in a simpler vector format (e.g., reduced) in order to use less disk space. The simple vector format may be provided in a feature (features occurring in different sections of the input are counted separately) and one line for each input document. Each cell in the feature count table may contain several different counts for the feature (absolute count plus several relative counts), and is designed to be as information rich as possible so that various runs using different counting, weighting or filtering strategies do not have to revisit the input text. The output of this feature is a table with vectors suitable as input for a chosen machine learning program.

The vector data may then be submitted to a machine learning module (not shown) where an algorithm is applied to the data. Alternatively, the rule may be derived by manual analysis, manual modification of

machine generated rules or a combination of the above. Testing provides a precision, recall, accuracy or other statistic analysis of the tested data. The output of the learning module is a set of classification rules 126 (FIG. 2).

The processing described at column 5, lines 21-43, however, does not indicate that the application of any rules set determines at least one other rule set next to be applied.

It is admitted in the Final Office Action mailed June 4, 2007, furthermore, that Buskirk does not disclose or suggest "applying the one or more rule sets to the message content in accordance with a hierarchical structure." Accordingly, Buskirk can not disclose or suggest classification rule sets that are associated with one another in accordance with a hierarchical structure.

For the hierarchical application of the rules, the Final Office Action mailed June 4, 2007 cites Saraki. Saraki concerns a translation machine for translating hierarchically arranged text. In particular, the Final Office Action mailed June 4, 2007 cites Figs. 1A and 1B; the Abstract; and col. 6, line 63 to col. 7, line 10 of Saraki. Appellant respectfully submits that none of these passages discloses classification rules that are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, as required by claim 1. Claims 8, 9 and 14-16 include similar recitations.

Appellant notes that the Examiner initially cited Saraki in the Fifth Office Action mailed November 1, 2006. In Appellant's response mailed March 29, 2007 to the Fifth Office Action, Appellant argued that Saraki does not disclose classification rules arranged into a plurality of rule sets, where the rule sets are associated with one another in accordance with a hierarchical structure. In the Final Office Action mailed June 4, 2007, the Examiner, however, did not address Appellant's remarks. The Examiner, rather, merely recited verbatim her assertions of the Fifth Office Action regarding Saraki.

In Figs. 1A and 1B, Saraki discloses "a parsing tree in a conventional machine translation system." There is no indication in Saraki that this parsing tree is a classification rules set but, even if it were, it is at best a single rules set. There is no indication of <u>multiple hierarchically arranged rule sets</u> as required by claims 1, 8, 9,

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and 14-16. The parsing tree does not satisfy the description in the claims of a classification rules set because it does not classify an electronic message into at least one message category. Instead, the parsing tree identifies <u>individual parts of speech in a sentence</u>.

The Abstract of Saraki describes a translation machine which extracts relationship information from received text. As described, the machine analyzes sentence structure and semantics and then synthesizes translated sentences. It does not disclose or suggest any classification of received message text. Accordingly, Saraki can not disclose or suggest any classification rule sets or any hierarchically organized classification rule sets.

Saraki, at col. 6, line 63 to col. 7, line 10 describes how the hierarchical text is processed. It is noted that the reference in Saraki is to "hierarchical text" not to a hierarchical rule sets, as required by claims 1, 8, 9 and 14-16. Again, at best, Saraki describes a single rule set which operates on the hierarchical text, not hierarchical rule sets that are used to classify messages and in which the result of applying one rule set determines at least one other rule set next to be applied to said message content, as required by claim 1. Claims 8, 9 and 14-16 include similar recitations. Accordingly, Saraki does not supply the deficiencies of Buskirk because Saraki does not disclose or suggest hierarchical rule sets that are used to classify messages and in which the result of applying one rule set determines at least one other rule set next to be applied to said message content.

Furthermore, Appellant asserts that the combination of Buskirk and Saraki is improper. The Examiner has not provided evidence as to why the skilled person would combine Buskirk (which teaches a classifier) with Saraki (which teaches parsing tree), that perform two different functions, to produce the hierarchical rule sets of the subject invention. Indeed, Saraki only describes the processing of "hierarchical text" but does not disclose or suggest hierarchical rule sets. Furthermore, Saraki teaches parsing hierarchical text using a non-hierarchical rule set (i.e. a single rule set). There is no substantial evidence in the record to support the modification of these cited references to include hierarchical rule sets to produce the subject invention. Accordingly, the rejection is improper.

Accordingly, for the reasons set forth above, claims 1, 8, 9 and 14-16 are not subject to rejection under 35 U.S.C. § 103(a) as being unpatentable in view of Buskirk and Saraki. Claims 2-7 and 11-13 depend from claim 1 and claim 10 depends from claim 9. Accordingly, these claims are not subject to rejection under 35 U.S.C. § 103(a) as being unpatentable in view of Buskirk and Saraki for at least the same reasons as claims 1 and 9.

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E. APPELLANT'S INVENTION, AS RECITED BY CLAIMS 8 AND 15 ARE NOT SUBJECT TO OBJECTION AS LACKING PROPER ANTECEDENT BASIS BECAUSE CLAIMS 8 AND 15 INCLUDE SUPPORT FOR THE FEATURE "COMPUTER-READABLE MEDIUM" AT AS PAGE 18, LINES 15-21.

In the Fifth Office Action mailed November 1, 2006, claims 8 and 15 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In Appellant's response to the Fifth Office Action mailed March 29, 2007, Appellant amended claims 8 and 9 to recite a "classification module tangibly embodied in a computer readable medium."

In the Final Office Action mailed June 4, 2007, claims 8 and 15 were objected to as failing to provide proper antecedent basis for the claimed subject matter. In particular, the Examiner asserts that the phrase "computer-readable medium," is "not disclosed anywhere in the specification." This objection is respectfully traversed.

Appellant agrees that the phrase "computer-readable medium" is not specifically recited in the specification. Appellant notes, however, that the claimed invention subject matter need not be described literally, i.e., using the same terms, in order for the disclosure to satisfy the description requirement. MPEP §2106. Appellant's specification, at *AS* page 18, lines 15-21 recites:

The classifier 434 conveniently, but not necessarily, takes the form of a CORBA server, preferably written in Java, or similar programming language. The text analyzer 36 is conveniently, but not necessarily, available to the classifier 434 as part of a DLL (Dynamic Link Library), or a UNIX SO (shared object) as appropriate, and arranged to allow multiple instantiation.

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Based on AS page 18, lines 15-21, the classifier module is described in terms of a server (such as a CORBA server) and written in software such as Java. Accordingly, the skilled person would understand that the classifier module, including software, is stored in the server, a computer readable medium. Thus, claims 8 and 15 are supported by Appellant's specification.

CONCLUSION

Appellant has advanced one reason demonstrating that the disclosures of Buskirk combined with Saraki are insufficient as a basis for an obviousness rejection of the pending claims. Accordingly, Appellants respectfully request the Board's reversal of this rejection.

Respectfully submitted,

Kenneth N. Nigon, Reg. No. 31,549

Attorney for Applicant

Dated: March 4, 2008

VIII. CLAIMS APPENDIX

1. An electronic message processing system arranged to receive electronic messages, the system comprising:

means for storing a plurality of classification rules; at least one text analyzer;

a respective rule engine associated with the at least one text analyzer and with the rule storage means,

the at least one text analyzer and associated rule engine being cooperable to apply at least one classification rule to the content of a received electronic message and to generate at least one result based on the application of said at least one classification rule;

a classification module co-operable with the at least one text analyzer and associated rule engine and arranged to classify the electronic message into at least one message category based on said at least one result,

wherein the classification rules are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, the classification module being arranged to cause the at least one text analyzer in association with the associated rule engine to apply at least one of said rule sets to the message content in accordance with said hierarchical structure wherein the at least one result generated by application of a rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to said message content.

- 2. An electronic message processing system as claimed in Claim 1, wherein the at least one text analyzer and associated rule engine are arranged to generate a respective result set for the at least one rule set applied to the message content, the classification module being arranged to determine respectively from the at least one result of the at least one rule set whether to classify the message in a category or to cause a further rule set to be applied to the message content.
- 3. An electronic message processing system as claimed in claim 1, wherein the a text analyzer includes the rule engine.

- 4. An electronic message processing system as claimed in claim 3, wherein the classification module is arranged to instantiate a respective instance of the text analyzer for each rule set, each text analyzer instance being arranged to apply its respective rule set to the message content.
- 5. An electronic message processing system as claimed in claim 4, wherein each text analyzer instance is associated with a respective lexical analysis tool.
- 6. An electronic message processing system as claimed in claim 5, wherein the lexical analysis tool includes a dictionary.
- 7. An electronic message processing system as claimed in claim 1, wherein the rule storage means comprises a plurality of rule files, each rule file containing a respective rule set.
- 8. A classification module tangibly embodied in a computer readable medium for use in an electronic message processing system, the system comprising means for storing a plurality of classification rules; at least one text analyzer; a respective rule engine associated with the at least one text analyzer and with the rule storage means, the at least one text analyzer and associated rule engine being co-operable to apply at least one classification rule to the content of an electronic message received by the system and to generate at least one result based on the application of said at least one classification rule,

the classification module being arranged for co-operation with the at least one text analyzer and associated rule engine and further arranged to classify the electronic message into at least one message category based on said at least one result,

wherein the classification rules are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, the classification module being arranged to cause the at least one text analyzer in association with the associated rule engine to apply at least one of said rule sets to the message content in accordance with said hierarchical structure wherein the at least one result generated by the application of a rule set

from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to said message content.

9. In an electronic message processing system arranged to receive electronic messages, the system comprising means for storing a plurality of classification rules; at least one text analyzer; a respective rule engine associated the at least one text analyzer and with the rule storage means, the at least one text analyzer and associated rule engine being co-operable to apply at least one classification rule to the content of a received electronic message and to generate at least one result based on the application of said at least one classification rule; and a classification module co-operable with the at least one text analyzer and associated rule engine and arranged to classify the electronic message into at least one message category based on said at least one result, a method of classifying an electronic message comprising:

arranging the classification rules into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure;

causing the at least one text analyzer, in association with the associated rule engine, to apply at least one of said rule sets to the message content in accordance with said hierarchical structure; and

determining at least one other rule set from said plurality of rule sets next to be applied to said message content depending on the at least one result generated by application of the preceding rule set from said plurality of rule sets to the message content.

10. A method of classifying an electronic message as claimed in claim 9, further including:

instantiating a respective instance of the text analyzer for each rule set; and

arranging each text analyzer instance to apply its respective rule set to the message content.

11. An electronic message processing system as claimed in claim 1, wherein the electronic messages to be processed include unstructured text-based messages.

- 12. An electronic mail (e-mail) processing system comprising an electronic message processing system as claimed in claim 1.
- 13. An SMS message processing system comprising an electronic message processing system as claimed in claim 1.
- 14. An electronic message processing system arranged to receive electronic messages, the system comprising:

means for storing a plurality of classification rules;

a classification module arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result,

wherein the classification rules are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, the classification module being arranged to cause at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure wherein the at least one result generated by application of a rule set from said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to the message content.

15. A classification module, tangibly embodied in a computer readable medium, for use in an electronic message processing system for receiving electronic messages, the system comprising means for storing a plurality of classification rules, wherein:

the classification module is arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result, wherein the classification rules are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, and

the classification module is arranged to cause at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure whereby the at least one result generated by application of a rule set from

said plurality of rule sets to the message content determines at least one other rule set from said plurality of rule sets next to be applied to the message content.

16. In an electronic message processing system arranged to receive electronic messages, the system comprising: means for storing a plurality of classification rules;

a classification module arranged to cause at least one classification rule to be applied to the content of a received electronic message to generate at least one result, wherein the classification rules are arranged into a plurality of rule sets, said rule sets being associated with one another in accordance with a hierarchical structure, a method of classifying an electronic message comprising:

causing at least one of said rule sets to be applied to the message content in accordance with said hierarchical structure; and

determining at least one other rule set from said plurality of rule sets next to be applied to the message content depending on the at least one result generated by application of the preceding rule set of said plurality of rule sets to the message content.

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IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None